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(71) Applicant: RICOH CO LTD

(72) Inventor: KOYANO MASAYUKI
 KOJIMA AKIO
 NAGAI KIYOFUMI
 IGARASHI MASATO
 KONISHI AKIKO
 MOCHIZUKI HIROTAKA
 TSUYUKI TAKANORI
 YAMADA IKUKO

(54) AQUEOUS INK FOR INK-JET RECORDING AND
RECORDING METHOD USING THIS INK

(57) Abstract:

PROBLEM TO BE SOLVED: To provide an aqueous ink which offers a high discharge reliability, forms a clean image on the recording material and ensures a high image quality in high speed imaging when used in an ink-jet recording with multiple color inks, and a recording method.

SOLUTION: An aqueous ink for ink-jet recording contains a colorant which is soluble to or dispersible in water and which has at least one acidic group in the chemical

structure, water and a wetting agent as essential components, and uses at least two different color inks. Here, the absorption spectrum $f_{mb}(\lambda)$, obtained when equal weight amounts of two arbitrary color inks are mixed, satisfies the following condition:
$$f_{mb}(\lambda) = \{f_1(\lambda) + f_2(\lambda)\} \cdot a / 2$$
 (wherein λ is a wavelength of 380-780 nm; $f_{mix}(\lambda)$ is the absorption spectrum obtained when equal weight amounts of two color inks are mixed; $f_1(\lambda)$ is the absorption spectrum of the ink 1 alone; $f_2(\lambda)$ is the absorption spectrum of the ink 2 alone; a is a real number of 0.9-1.1).

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